

### Abstract

A heat pipe heat spreader is provided having a substantially L-shaped enclosure with an internal surface and a plurality of post projecting from the surface. A working fluid is disposed within the enclosure, and a grooved wick is formed on at least a portion of the internal surface. The grooved wick includes a plurality of individual particles having an average diameter, and including at least two lands that are in fluid communication with one another through a particle layer disposed between the at least two lands that comprises less than about six average particle diameters. A method for making a grooved heat pipe wick on an inside surface of a heat pipe container a layer of sintered powder between adjacent grooves that comprises no more than about six average particle diameters.

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